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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/409,478	09/30/1999	ROBERT D. TYLER	WICP.68041	5420

7590

06/25/2003

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EXAMINER

LEE, EDMUND H

ART UNIT	PAPER NUMBER
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1732

8

DATE MAILED: 06/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

mk-2

**Office Action Summary**

Application No.

09/409,478

Applicant(s)

TYLER

Examiner

EDMUND H LEE

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
 Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 April 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-18 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schriener et al (USPN 2915427) in view of Reuben (USPN 5171619) and Bailey (USPN 4828898). In regard to claim 1, Schriener et al teach the basic claimed process ~~including a method of producing a vehicle mat (figs 1-4); providing a sheet of~~ thermoplastic material, the sheet having a first and second side (figs 1-4); placing the sheet in contact with a contoured molding tool, the first side directed toward the tool and the second side directed away from the tool (figs 1-4); heating the sheet (col 2, lns 57-64); and vacuum forming (drawing) the sheet toward the tool until the sheet is substantially shaped to the contour of the tool (figs 1-4). In addition, Schriener et al also teach placing the carpet side of the mat against the mold and the backing side away from the mold (figs 1-4). However, Schriener et al does not teach using a sheet of thermoplastic material wherein the second side has a plurality of ribs extending therefrom; using a molding tool having one or more sidewalls that extend upwardly from a flat base and a top surface; and locating the second side of the sheet directed away from the tool. Reuben teaches a method of producing a vehicle mat (figs 1-4); and extruding a sheet of thermoplastic material (thermoplastic elastomer), the sheet having

a first and second side, the second side having a plurality of nibs extending therefrom

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(figs 1-4). Schriner et al and Reuben are combinable because they are analogous with respect to vehicle mats. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the mat of Reuben for the fabric/mat of Schriner et al in order to produce a high-quality vehicle mat having greater traction to an underlying surface. It should be noted that the combination of Schriner et al and Reuben would direct one of ordinary skill in the art to place the carpet side of the mat of Schriner et al (modified) against the mold of Schriner et al thus the nib side of the mat of Schriner et al (modified) would be facing away from the mold. Bailey teaches molding a vehicle mat having a one or more sidewalls and a top surface (fig 4); and vacuum

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forming the mat to the desired contour between two mold dies each having a flat base (figs 4-5). Schriner et al and Bailey are combinable because they are analogous with respect to vehicle mats. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to redesign the mold tool of Schriner et al to produce the contour of Bailey, i.e., redesigning the mold tool to have one or more sidewalls that extend upwardly from a flat base and a top surface, in order to produce a diverse vehicle mat that can nest within and abut against the sides of a carpeted floor well of a vehicle. In regard to claims 2-5 and 7-8, Schriner et al teach drawing by differential pressure (figs 1-4); applying the vacuum pressure through vacuum apertures in the tool (figs 1-4); using a male tool (figs 1-4); producing at least one mat (figs 1-4); and cooling the sheet and removing the sheet from the tool (figs 1-4)—as a note, this is inherent with the process of Schriner et al in order to produce a useable mat. However,

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Schriner et al does not teach using a thermoplastic elastomer. The combination of

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Reuben and Schriner et al teach using a thermoplastic elastomer.

3. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schriner et al (USPN 2915427) in view of Reuben (USPN 5171619) and Bailey (USPN 4828898). In regard to claim 9, Schriner et al teach the basic claimed process including a method of producing a vehicle mat (figs 1-4); providing a sheet of thermoplastic material, the sheet having a first side (figs 1-4); placing the sheet in contact with a contoured molding tool, the first side directed away from the tool (figs 1-4); heating the sheet to a plastic state (col 2, lns 57-64); and vacuum forming (drawing) the sheet toward the tool until the sheet is substantially shaped to the contour of the tool (figs 1-4).

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In addition, Schriner et al also teach placing the carpet side of the mat against the mold and the backing side away from the mold (figs 1-4). However, Schriner et al does not teach extruding a sheet of thermoplastic material between a pair of rollers wherein one of the rollers has a plurality of indentations to form nibs on a first side of the sheet; using a molding tool having one or more sidewalls that extend upwardly from a flat base and a top surface; and locating the first side of the sheet directed away from the tool. Reuben teaches a method of producing a vehicle mat (figs 1-4); extruding a sheet of thermoplastic material (thermoplastic elastomer), the sheet having a first side with a plurality of nibs extending therefrom (figs 1-4); and using a pair of rollers wherein one of the rollers has a plurality of indentations to form nibs on a first side of the sheet (figs 1-4). Schriner et al and Reuben are combinable because they are analogous with respect to vehicle mats. Thus, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to substitute the extruded mat of Reuben for the

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fabric/mat of Schriner et al in order to produce a high-quality vehicle mat having greater traction to an underlying surface. It should be noted that the combination of Schriner et al and Reuben would direct one of ordinary skill in the art to place the carpet side of the mat of Schriner et al (modified) against the mold of Schriner et al thus the nib side of the mat of Schriner et al (modified) would be facing away from the mold. Bailey teaches molding a vehicle mat having a one or more sidewalls and a top surface (fig 4); and vacuum forming the mat to the desired contour between two mold dies each having a flat base (figs 4-5). Schriner et al and Bailey are combinable because they are analogous with respect to vehicle mats. Thus, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to redesign the mold tool of Schriner et al to produce the contour of Bailey, i.e., redesigning the mold tool to have one or more sidewalls that extend upwardly from a flat base and a top surface, in order to produce a diverse vehicle mat that can nest within and abut against the sides of a carpeted floor well of a vehicle. In regard to claims 10-12, Schriner et al teach drawing by vacuum pressure (figs 1-4). However, Schriner et al does not teach using a thermoplastic elastomer; and using the blend of claim 11. In regard to using a thermoplastic elastomer, such is taught by the combination of Reuben and Schriner et al. In regard to using the blend of claim 11, such is a mere obvious matter of choice dependent on the desired final product and material availability and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed material is well-known for its durability. Thus, it

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would have been obvious to one of ordinary skill in the art at the time the invention was

made mold the mat of Schrinier et al (modified) from the claimed material in order to impart durability to the mat.

4. Claims 13-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrinier et al (USPN 2915427) in view of Reuben (USPN 5171619) and Bailey (USPN 4828898). In regard to claim 13, Schrinier et al teach the basic claimed process including a method of producing a vehicle mat/part (figs 1-4); providing a sheet of thermoplastic material, the sheet having a first and second side (figs 1-4); placing the sheet in contact with a contoured molding tool, the first side directed toward the tool and the second side directed away from the tool (figs 1-4); heating the sheet (col 2, lns 57-

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64); and vacuum forming (drawing) the sheet toward the tool until the sheet is substantially shaped to the contour of the tool (figs 1-4). In addition, Schrinier et al also teach placing the carpet side of the mat against the mold and the backing side away from the mold (figs 1-4). However, Schrinier et al does not teach using a sheet of thermoplastic material wherein the second side has a plurality of nibs extending therefrom; using a molding tool having one or more sidewalls that extend upwardly from a flat base and a top surface; and locating the second side of the sheet directed away from the tool. Reuben teaches a method of producing a vehicle mat (figs 1-4); and extruding a sheet of thermoplastic material (thermoplastic elastomer), the sheet having a first and second side, the second side having a plurality of nibs extending therefrom (figs 1-4). Schrinier et al and Reuben are combinable because they are analogous with respect to vehicle mats. Thus, it would have been obvious to one of ordinary skill in the

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~~art at the time the invention was made to substitute the mat of Reuben for the fabric/mat~~

of Schriner et al in order to produce a high-quality vehicle mat having greater traction to an underlying surface. It should be noted that the combination of Schriner et al and Reuben would direct one of ordinary skill in the art to place the carpet side of the mat of Schriner et al (modified) against the mold of Schriner et al thus the nib side of the mat of Schriner et al (modified) would be facing away from the mold. Bailey teaches molding a vehicle mat having a one or more sidewalls and a top surface (fig 4); and vacuum forming the mat to the desired contour between two mold dies each having a flat base (figs 4-5). Schriner et al and Bailey are combinable because they are analogous with respect to vehicle mats. Thus, it would have been obvious to one of ordinary skill in the

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art at the time the invention was made to redesign the mold tool of Schriner et al to produce the contour of Bailey, i.e., redesigning the mold tool to have one or more sidewalls that extend upwardly from a flat base and a top surface, in order to produce a diverse vehicle mat that can nest within and abut against the sides of a carpeted floor well of a vehicle. In regard to claims 14-18 and 20, Schriner et al teach drawing by differential pressure (figs 1-4); applying the vacuum pressure through vacuum apertures in the tool (figs 1-4); using a male tool (figs 1-4); producing at least one mat (figs 1-4); and cooling the sheet and removing the sheet from the tool (figs 1-4)—as a note, this is inherent with the process of Schriner et al in order to produce a useable mat. However, Schriner et al does not teach using a thermoplastic elastomer; and using the blend of claim 15. The combination of Reuben and Schriner et al teach using a thermoplastic elastomer. In regard to using the blend of claim 15, such is a mere obvious matter of



choice dependent on the desired final product and material availability and of little

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patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed material is well-known for its durability. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made mold the mat of Schrinier et al (modified) from the claimed material in order to impart durability to the mat.

5. Applicant's arguments filed 4/5/03 have been fully considered but they are not persuasive. Applicant's argues that none of the references teach heating the sheet after placing the sheet in contact with the molding tool. This argument is misplaced because

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the instant claims do not require that the sheet be heated after placement on the molding tool. The claims merely recite heating the sheet to a plastic state. There is no reference to heating the sheet while in contact with the molding tool. Applicant is reminded that a listing of steps in a method claim does not imply a sequence unless each step makes a reference to a previous step. Applicant also argues that none of the references teach drawing the sheet toward the molding tool after heating step. This argument is misplaced because the instant claims do not require that the sheet be drawn after the heating step. The claims merely recite drawing the sheet to a plastic state. There is no reference to drawing a heated sheet. Applicant is reminded that a listing of steps in a method claim does not imply a sequence unless each step makes a reference to a previous step. Applicant also argues that there is no suggestion to combine the references. Here, each reference teaches providing floor mats for

automobiles wherein the mats have a plastic backing layer and fabric top layer. The

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motivation to combine the references is to efficiently produce a non-slip, contoured floor mat for an automobile.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fujiki (USPN 5554333) and Price (USPN 3555601) teach extrusion molding nibs. Sugihara (USPN 602044) teach vacuum forming mats having the claimed shape.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H LEE whose telephone number is

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703.305.4019. The examiner can normally be reached on MONDAY-THURSDAY  
FROM 9AM-4PM.

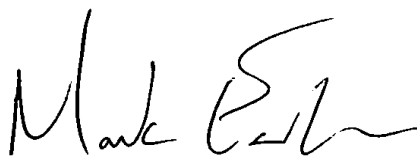
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD CRISPINO can be reached on 703.308.3853. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.7718 for regular communications and 703.305.3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0661.

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EDMUND H LEE  
Examiner  
Art Unit 1732  
6/19/03

EHL  
June 19, 2003

  
MARK EASHOO, PH.D  
PRIMARY EXAMINER  
Art Unit 1732  
24 / Jun / 03